

Alberta International **Export Strategy**

1995-1996 • Marketing the Alberta Advantage



OVERVIEW



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ALBERTA

Office of the Premier



In today's highly competitive global marketplace, trade, investment and a positive business climate are vital for success. Alberta has all of this and more.

The *Alberta International Export Strategy 1995/96: Marketing the Alberta Advantage* outlines the tremendous opportunities for tourism, trade, investment, industry and technology development that exist for Alberta companies in the international marketplace. This document sets directions for the province and highlights opportunities in 16 key industry sectors. A brief overview is included for each sector, along with issues and challenges, strategic directions and activity plans.

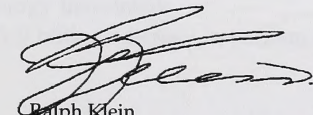
Alberta's economy has shown strong growth since 1993. Alberta is taking on the world. Our province offers businesses and workers the environment in which to grow, low taxes, now provincial sales tax and reduced regulations.

That's just part of the "Alberta Advantage." Our workforce is young, well educated and committed to free enterprise; we are blessed with an abundance of natural resources and a modern, supportive infrastructure; and the province is solidly committed to research and development.

To help Albertans compete successfully in the global marketplace, we've gone to the people who have the most say in the matter, Albertans. Our export strategy is a result of extensive public consultations and partnerships with the private sector. The strategies put forth in this document were developed by sector teams representing a range of government departments, with input from the Alberta Economic Development Authority and the private sector.

The *Alberta International Export Strategy: Marketing the Alberta Advantage* is not the end point in our journey, but rather the beginning. It reflects where we are today and where we hope to be tomorrow. Through continued and strengthened industry/government cooperation we will be able to further refine our strategies. The Alberta Government is committed to working with industry to implement the strategic directions noted in the sector strategies, and to participate in activities, as appropriate, based on support from industry.

Use the *Alberta International Export Strategy 1995/96: Marketing the Alberta Advantage* as your guide to discovering important opportunities in all industry sectors. I also invite you, through input and action, to ensure that Alberta remains a province focused on people, prosperity and preservation.



Ralph Klein
Premier



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Introduction

The *Alberta International Export Strategy 1995/96 - Marketing the Alberta Advantage* sets out strategic directions for Alberta trade and tourism, industry and technology development, and investment. It also presents specific strategies and activity plans for 16 sectors of the Alberta economy.

These strategies were developed by Alberta Economic Development and Tourism, in partnership with the Alberta Economic Development Authority, other provincial and federal departments and the private sector. This strategic partnership follows the new directions for government set out in *Seizing Opportunity*, Alberta's new economic strategy and builds on sector strategies presented in the Alberta Global Business Plan 1994/95.

The *Alberta International Export Strategy* is also an important part of the three-year business plans of participating departments. Alberta Economic Development and Tourism has three strategic core businesses for 1995 to 1998 - Investment and Industry Strategy, Trade Development and Export Sales Strategy, and Business Infrastructure Strategy - that will create an environment in which business can make informed decisions and lead in the sustained growth and expansion of Alberta's economy. The business plan also sets out economic goals for Alberta to be achieved by 1997:

- 110,000 new jobs
- \$25.2 billion annually in exports
- \$12 billion annually in private sector, non-energy investment
- \$3.9 billion annually in tourism receipts.

These goals can be achieved by government creating a positive business environment and working with industry to implement the strategies in this document. The AEDA will play a lead role in working with business to implement the strategies that have been developed.

Finally, the Alberta International Export Strategy will complement the federal government's *International Trade Business Plan* for 1995/96. More information about sectors and activities of interest to you may be found in that document, available from federal offices in Edmonton and Calgary.

How to Use this Document

This summary document presents an overview of the Alberta International Export Strategy. Sixteen sector tables are included, which summarize strengths, the challenges faced in international markets, and recommended strategies for strengthening the sector's presence in the global market. An additional table, highlighting similar information regarding investment, is also included.

For copies of the complete document, please contact Alberta Economic Development and Tourism at 427-4838 (phone); or 422-0061 (fax).

International Opportunities - International Challenges

Alberta's prosperity has always been strongly linked to the economies of other provinces and countries. Trade is key to Alberta's economy, accounting for over 27% of Gross Domestic Product. With a small domestic market of only 2.8 million people, Alberta must rely on increased exports to generate wealth and create jobs. International ties are also important to attract new investment and technology to Alberta.

Alberta companies are faced with many challenges in expanding their exports and investment opportunities. The world economy is restructuring at a rapid pace, with significant shifts in financial and consumer markets, transportation and technology. The global marketplace requires companies to respond to the challenges of global marketing, global sourcing and greater control by multinational companies. Increased trade in value-added goods and services, and reduced trade in commodities, will challenge Alberta's traditional industries and force Alberta companies to restructure and reorient their production and marketing processes to improve productivity.

As trade barriers continue to fall, competition for Alberta companies will increase. Governments are relying less on the use of protective tariffs and direct subsidies to industry to develop their economies. Alberta companies have to compete for investments and markets in an increasingly integrated global economy. The North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT) are providing new opportunities and new challenges for Alberta exports.

Political changes also continue to affect world markets ... and affect Alberta businesses. Political and economic changes will likely continue to cause uncertainty, creating challenges for both marketing and investment decision makers over the coming decade.

Alberta faces the challenges of global competitiveness with many advantages. Long recognized as a "trading province", Alberta's economy today reflects the inherent strengths that have driven much of our recent growth and prosperity -- abundant natural resources, an entrepreneurial spirit and an attractive business climate. In addition, the Alberta Advantage includes superior economic performance, a competitive tax climate, a skilled and productive workforce, world-class infrastructure, and an economic climate that is conducive to investment, wealth generation and job creation.

Partnership in Business Development

The Alberta government recognizes that its main role is to create an environment in which the private sector can prosper -- creating jobs for Albertans, expanding investment opportunities, and promoting export sales.

Competitive markets also require that Alberta's goods and services be marketed aggressively to the global marketplace. This can be achieved more effectively through a partnership of industry and government. The sector strategies outlined in this document represent the efforts of government departments, the Alberta Economic Development Authority and the private sector to establish an integrated approach, rather than separate paths, to developing strategies and marketing activities that maximize Alberta's economic advantages.

Partners in Trade and Tourism

International trade is an essential link to the prosperity of the province. In 1994, the value of exports of goods and services to 151 countries reached an estimated record high of \$25.1 billion (Table 1), up 16.2% from 1993. Over 2,000 companies in Alberta today export their goods and services outside the province. For every \$1 billion

increase in exports, approximately 15,000 new jobs are created.

Table 1
Alberta Goods & Services International Exports 1993 & 1994
(\$ Millions)

	1993 \$	% of Total	1994 \$	% of Total	% Chg. 1994/93
Prim. Agr. & Related	1,898.8	8.8	2,391.7	9.5	26.0
Prim. Log. & For.	2.5	0.0	8.0	0.0	220.0
Total Mining	11,793.7	54.6	12,630.5	50.3	7.1
Oil, Gas & Sulph.	11,111.1	51.5	11,922.5	47.5	7.3
Excl. Oil, Gas & Sulphur	682.5	3.2	708.0	2.8	3.7
Manufacturing	5,791.1	26.8	7,719.2	30.8	33.3
Food, Feed & Bev.	752.9	.5	969.8	3.9	28.8
Plastics	45.8	0.2	56.7	0.2	24.0
Textiles	114.3	0.5	100.4	0.4	-12.1
Clothing	13.2	0.1	18.1	0.1	37.4
Wood Prod.	277.3	1.3	427.9	1.7	54.3
Furn. & Fixtures	63.5	0.3	93.6	0.4	47.3
Paper & Allied Prod.	442.1	2.0	853.3	3.4	93.0
Primary Metals Fabricated	134.0	0.6	224.3	0.9	67.4
Metal Prod.	79.0	0.4	104.3	0.4	32.0
Machinery	387.2	1.8	344.3	1.4	-11.1
Trans. Equipment	95.1	0.4	123.1	0.5	29.5
Elect. & Elect. Equip.	372.4	1.7	615.7	2.5	65.3
Non-Metallic Mineral Prod.	38.7	0.2	44.1	0.2	14.0
Ref. Petroleum & Coal Prod.	1,194.6	5.5	1,538.8	6.1	28.8
Chem. & Chem. Products	1,606.4	7.4	2,022.8	8.1	25.9
Other Manufact.	174.6	0.8	181.9	0.7	4.2
Other Exports	205.1	1.0	258.9	1.0	26.3
TOTAL GOODS	19,688.4	91.2	23,008.2	91.7	16.9
Tourism	771.2	3.6	*841.1	3.4	9.1
*Other Serv.	1,124.2	5.2	*1,236.6	4.9	10.0
TOTAL SERV.	1,895.4	8.8	*2,077.7	8.3	9.6
TOTAL EXP.	21,584.0	100.0	25,085.9	100.0	16.2

* Estimates
R Revised

Source: Statistics Canada

Alberta's exports have long been dominated by primary resources. The mining industry, including oil and gas, made up 50.3% of merchandise exports in 1994, while primary agriculture exports accounted for 9.5%.

Manufacturing exports vital to the province's growth and diversification made up 30.8% of Alberta's total goods exports in 1994. Among manufacturing industries, there were significant levels of exports in food processing, wood and paper products, electrical and electronic equipment, refined petroleum and coal products, and chemicals and chemical products.

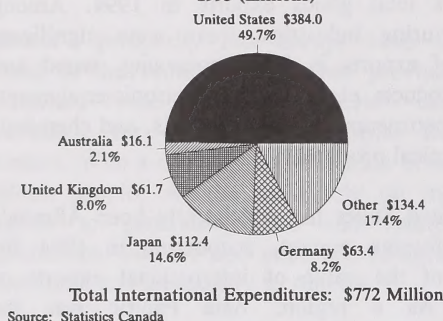
The United States has consistently been Alberta's largest foreign market, accounting in 1994 for 80.3% of the value of international exports of goods. As a region, Asia Pacific was the destination for another 12.9% of goods exports in the same year, with Japan representing Alberta's second largest export market overall (6.1% of total).

Exports of services are also increasing in importance in international trade, not only because of their growing value, but also because they represent the new "engine of growth" for the economy. Alberta's services exports, which accounted for an estimated \$2.1 billion of total 1994 exports of more than \$25.1 billion, include tourism, business services such as engineering, consulting and financial services, and transportation. Unfortunately, services exports are difficult to measure by industry or country, since data for services other than tourism are not available.

Alberta Economic Development and Tourism, in conjunction with Alberta Treasury-Statistics, is conducting a survey of industry sectors to measure the volume and value of services exports from the province. The objective of the survey is to track the performance of Alberta's services exports.

The tourism industry closely reflects the global economy. One of the province's largest industries, tourism employs about 100,000 Albertans. Building on the province's natural resource base, scenic beauty and cultural diversity, it also continues to be one of the most important growth areas of the economy.

Figure 1
International Tourism Expenditures in Alberta by Origin
1993 (millions)



In 1993, tourism generated over \$3.12 billion in revenue in Alberta, of which \$1.45 billion was from out-of-province visitors. Of this, \$772 million or 25% came from international visitors (see Figure 1). Key international markets included the U.S. (49.7%), Japan (14.6%), Germany (8.2%), the United Kingdom (8.0%), and Australia (2.1%). Visitors from the rest of Canada generated \$682 million or 22% of revenues. Slightly over half of all tourism revenues (\$1.7 billion or 53%) were generated by Albertans.

Alberta Strategies for Trade and Tourism

Alberta's goal is to increase exports to \$25.2 billion by the year 1997, an increase of 33% from 1992/93. Alberta also aims to increase the number of exporters from 2,000 to 3,000 over the three years. For tourism, the goal is to achieve \$3.9 billion annually in tourism receipts by 1997.

To achieve these targets, government will focus on the following strategies to help industry compete in the international marketplace:

- Increase awareness within Alberta of the importance of exports
- Market Alberta's image outside the province
- Provide support for first-time exporters
- Improve market information collection and dissemination
- Develop strategic plans with industry
- Provide focused assistance for Alberta companies in international markets

- Expand reverse marketplace activities
- Facilitate development of strategic alliances
- Improve intergovernmental cooperation.

The sector strategies and action plans outlined in this *Alberta International Export Strategy* provide the mechanism to achieve these goals and to implement overall strategies.

The Alberta government recently released its latest draft export marketing strategy entitled *Targeting Asia Pacific: Towards A Strategy For Growth*. This framework for a strategy, which will be developed through business consultation in 1995, complements the sector strategies in this document. Also in 1995, a strategy for the Americas will be developed in consultation with business.

Further information on trade and tourism strategies, programs and activities, for sectors or for geographic regions, may be obtained by contacting Tourism, Trade and Investment Division Services at (403) 422-6236 or fax (403) 422-9127 or Alberta Agriculture, Food and Rural Development at (403) 427-4241 or fax (403) 422-9746.

Partners in Industry and Technology Development

Sustaining competitive, global industries is key to Alberta's growth and prosperity. Alberta has been fortunate in developing a strong industrial base, linked primarily to the resource industries of agriculture, energy and forestry. To provide jobs and wealth for the future, Alberta must build on these inherent strengths and increase production of value-added goods and services.

Today, technology development is the driving force behind productivity improvements and competitiveness. Finding and applying new technologies to expand production or improve product quality requires investment in technology, equipment and people. Investment in research and development is also vital to remaining competitive. With an average investment of over \$250 million per year, the Alberta government is one of the

largest financial contributors in Canada to science and technology activity. From 1983 to 1993, \$2.6 billion has been invested in promoting science and technology; a number of centres of advanced technology have been developed; and over 1,000 high technology companies are now active in Alberta, employing more than 50,000 people.

Alberta recently established the Alberta Science and Research Authority, which will work with industry and government to identify the strategic priorities and opportunities in science and research and coordinate research and development programs funded by the province.

Alberta Strategies for Industry and Technology Development

Diversification, growth and competitiveness are key to the development of industry and technology in Alberta. The Department works in partnership with industry and other investors inside and outside of Alberta on a wide range of industrial development initiatives to:

- Accelerate the rate of investment in Alberta.
- Broaden further the manufacturing base in Alberta.
- Expand and develop existing industry sectors.
- Encourage establishment of new industry sectors.

Major activities supporting these aims include:

- Targeting promotional efforts to actively attract new manufacturing and processing companies to Alberta.
- Assisting industrial firms inside and outside Alberta interested in investment opportunities to address their needs in development decisions.
- Identifying and evaluating development opportunities and markets.

- Providing timely market intelligence, information and advice.
- Carrying out competitiveness and productivity improvement initiatives.
- Offering procurement assistance and technology awareness services.
- Providing assistance with various planning and regulatory processes to allow expansion and increased competitiveness of existing companies and establishment of new operations.
- Helping Alberta companies develop supplier capability and increase buyer awareness of this capability.

Technology development in Alberta is a responsibility shared by the private sector, academic institutions, and government departments and agencies such as Alberta Economic Development and Tourism, the Alberta Research Council, the Alberta Economic Development Authority and the Alberta Science and Research Authority.

The economic growth/diversification potential associated with advanced technologies will be exploited by:

- Supporting the creation and expansion of technology-intensive industries and industrial clusters in the fields of advanced materials, biotechnology, telecommunications, electronics, environmental technologies, information technologies, and medical devices.
- Encouraging the application of advanced technologies in traditional resource industries, manufacturing, and the services sector.
- Ensuring that an effective scientific infrastructure is available to support the industries and industrial clusters.

Further information on the industry and technology development strategies, programs and services, may be obtained by contacting:

- Industry, Technology and Forestry Development Division of Alberta Economic Development and Tourism at (403) 427-2005
- Alberta Research Council at (403) 450-5111
- Alberta Science and Research Authority at (403) 427-1488

Partners in Maximizing Investment

Maximizing investment across all industry sectors is critical to support the province's economic growth through trade. Investment capital is essential for establishing new industries, expanding existing ones, and building essential infrastructure.

In 1994, total public and private investment in Alberta exceeded \$23.7 billion, including capital expenditures and repairs, an increase of about 10% from the previous year. This represented a 30% increase in investment in the oil and gas industry, but a 10% decline in the manufacturing sector.

Business immigration is another important source of skills and investment. Business immigration has increased, with Alberta receiving the fourth highest number of business immigrants in Canada in 1993: 6.7% overall. This includes 555 principal applicants in the entrepreneur, investor and self-employed categories, plus their dependents, for a total of approximately 2,100.

The average total money transferred upon arrival by business immigrants is \$812,000 for entrepreneurs and \$2,000,000 for investors, indicating potential for additional business and consumer-related spending. Each immigrant entrepreneur invests an average of \$100,000 and creates three to five jobs.

Continued strong investment is key to Alberta's growth; however, competition to secure investment is world-wide. The globalization of the world's economy, the trans-national nature of many of the world's corporations, and the ease with which capital can flow around the world, places Alberta in competition with jurisdictions throughout the world in attempting to attract capital and business activity. The demand for investment dollars is

affected by more than national or international competitors. Even within Alberta there is strong competition between jurisdictions for business investment for the benefit of the local community.

Competition in attracting investment is further heightened by the incentives offered by economic development agencies to potential investors. Incentives can range from direct financial assistance, including loans, loan guarantees, and grants, to variations in the level of basic taxes and tax exemptions, deductions, credits and special treatments.

Alberta has recently moved away from direct financial incentives to business with a strategy to now focus on the province's economic fundamentals and the overall climate for business.

Alberta Strategies for Maximizing Investment

A goal to increase annual private business investment (excluding energy) by 20% to \$12 billion by 1997 has been set by the Alberta government.

The role for government in investment is to build on the trends of the new global economy, the province's traditional strengths, and new and emerging investment opportunities in local communities.

To achieve the investment goal, the following three objectives have been established:

1. *To build a superior business climate which serves to attract new business investment and contributes to the retention and expansion of existing operations.* This includes:
 - A stable, growth-oriented society.
 - A deficit - and - debt - free provincial government.
 - Excellent infrastructure.

- Highly skilled and available human resources.
 - A favourable and streamlined regulatory regime.
 - The lowest rates of taxation.
 - A private sector focus.
 - An entrepreneurial attitude and an international outlook.
 - Community-based initiatives.
 - Timely, concise and comprehensive measures of investment activity.
2. *To increase the awareness of investment opportunities in Alberta among key potential investors.* This includes:
- An increase in the level of Albertans' knowledge of the advantages and opportunities of investing in Alberta.
 - An increase in the level of awareness in the global investment community of Alberta, Alberta investment opportunities and the advantages of investing in Alberta.
3. *To establish strong links between potential investors and investment opportunities.* In Alberta this includes:
- Readily accessible information for investors on investment opportunities.
 - Matching mechanisms between investors and specific investment opportunities.
 - Improved accessibility to capital.
 - Services to work with specific investment opportunities on a customized basis to help in addressing their capital needs.
 - Frameworks to nurture cooperative and complementary investment activities.

In pursuing these objectives the Alberta government is guided by the following strategic directions:

- High visibility and personal relationships with decision makers in the national and international financial and business community and the governments of other appropriate jurisdictions led by the Premier, Ministers and senior government officials.
- An in-depth knowledge and understanding of Alberta's advantages with focused actions and responses to clients derived from accurate and timely market intelligence.
- An in-depth knowledge and understanding of local and out-of province investors' needs and sensitivities combined with a service orientation.
- An in-depth knowledge and understanding of Alberta's competitors and their attributes.
- A communications and strategic marketing plan with support material that capitalizes on and stresses the advantages of investing in Alberta.
- Partnership and cooperation with Alberta's industry, business communities and other levels of government.

Investment Activities

Alberta Economic Development and Tourism undertakes a number of ongoing activities which cut across all industry sectors and are aimed at achieving the objectives to maximize investment in the province. These activities include:

- Marketing opportunities in Alberta for direct equity investment, licensing, technology transfers, mergers or acquisitions, joint ventures or other forms of strategic alliances through the Investment Matching Service of Alberta (IMSA) which serves a global and sophisticated investment network.

- Facilitating strategic alliances between Alberta companies and national and international companies to promote the transfer of technology, product development, and acquisition of management expertise by publishing and distributing "Strategic Alliances In Alberta".
- Managing the provincial responsibilities under the Business Immigration Program which markets Alberta as an attractive place for individuals from around the world to do business and/or settle, and thereby attracting substantial investment capital to Alberta. Investigating various models (i.e. blind stock pools, association-sponsored venture capital corporations, export financing, earned scientific tax credits etc.) to improve access to investment capital.
- Promoting the formation and operation of diverse and competitive capital markets in Alberta.
- Participating in the joint federal/western provinces study on financing for small and medium sized businesses in Western Canada.
- Working with specific investment opportunities on a customized basis to help address their capital needs.
- Leading outgoing and incoming investment missions.
- Working with proponents and investors inside and outside of Alberta on a wide range of industrial development projects aimed at accelerating the rate of investment in Alberta.

Further information about investment activities can be obtained by contacting:

- Tourism, Trade and Investment Division - (403) 422-6236
- Business Finance Division - (403) 427-3300
- Industry Technology and Forestry Development Division - (403) 427-2005
- Small Business and Tourism Development Division - (403) 427-3685
- Alberta Agriculture, Food and Rural Development - (403) 427-4241

Sector Strategies and Activity Calendars

The full Alberta International Export Strategy document presents detailed sector strategies for 16 sectors of importance to the Alberta economy. Each strategy identifies strategic directions and actions that will help to develop products and services for the global market.

Activity lists for 1995/96 for each sector identify various marketing events proposed for the coming year. Businesses are encouraged to contact the individuals listed for further information about participating in these events. The Alberta government will only participate in events or activities where there is support from the industry and private sector partners, and not necessarily in all activities listed.

Many other events -- trade shows, conferences, missions -- are offered in international markets. To obtain information on other related events, contact Tourism, Trade & Investment Division Services at (403) 422-6236 or fax (403) 422-9127.

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> Includes equipment and service firms that design, manufacture and service a full range of products for the general aviation and space markets. The products range from complete aircraft and spacecraft to all component parts on both these vehicles and complete ground-support equipment. Provides ongoing maintenance, repair and operational support services for air, space and ground equipment. Subsectors include: <ul style="list-style-type: none"> Repair & overhaul, aerospace aviation services and training, aircraft parts, engines and engine parts, aerospace-defence avionics, publication of technical manuals. <p>Other Facts</p> <ul style="list-style-type: none"> 60 companies are engaged in niche aerospace markets. Sales in 1992 were \$180 million. Currently employs approximately 2,100 people. 	<ul style="list-style-type: none"> Repair & Overhaul is strongest subsector, with expertise in maintenance, repair and modification of fixed and rotary wing aircraft. Aerospace Aviation Services and Training facilities for air and ground crew are excellent and serve the world market. Strong base of world-competitive companies and dynamic, forward-looking management and employee teams position Alberta aerospace industry to increase role in the global aerospace market. A well trained workforce and infrastructure, as well as highly qualified engineering staff, enables firms to meet stringent quality standards. 	<ul style="list-style-type: none"> Success in some sectors is tied to one or two companies. Companies need to continually access new technologies to remain competitive. Critical mass is growing, but there are few large component suppliers with financial resources to assume more risk; small companies lack capital to grow and aggressively market their products and services. Companies are sometimes at a disadvantage because of customs delays in processing work orders. To be competitive, companies must use new advanced materials and processes. 	<ul style="list-style-type: none"> United States is principal export market. South America, Australia and Asia are also important growing markets for Alberta companies to focus on. 	<ul style="list-style-type: none"> Opportunities to expand Alberta's capabilities in small to medium-size engine repair and in overhaul of larger engines. Aging aircraft, fleets worldwide, mostly commercial, need new processes to extend their life. 	<ul style="list-style-type: none"> Continue to encourage and assist Alberta companies to set up alliances with first-level subcontractors. Help Alberta companies identify opportunities and follow up leads. Help industry obtain a business regarding the Canadian civil air navigation system. Work with industry to develop flexible business networks and strategic alliances. Identify a mechanism to provide required R&D support to industry. Work with industry to support manpower training and infrastructure. Help industry access investment financing and strategic partners. Work with industry to encourage the establishment and maintenance of a favourable tax and corporate business environment (a) within Alberta, and (b) with a view to influencing Canada's domestic environment. Help companies obtain a share of federal and U.S. government projects. Lobby federal government to (a) continue major sector projects, and (b) continue support of the aerospace industry. Continue to support centres of excellence. Encourage participation in trade shows and airshows as a means for Alberta companies to access potential clients and to develop cross promotions with the tourism sector. Help industry develop innovative marketing activities.

AGRICULTURAL AND INDUSTRIAL EQUIPMENT, TECHNOLOGY AND SERVICES

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> Two subsectors: agricultural equipment, and industrial equipment. Sales of agricultural equipment are about \$400 million annually, with 50% moving outside the province. Sales employ about 2,000 people in 230 companies. Sales of industrial equipment exceed \$500 million annually, employing over 4,700 people in 170 companies. 	<ul style="list-style-type: none"> Alberta's agricultural equipment subsector is diverse. Several companies produce component parts. These firms are able to focus on production of less sophisticated equipment and adapt more quickly than full-time firms to changing market conditions. Alberta has the potential to be the world-recognized source for agricultural machinery and technology in the next decade. 	<ul style="list-style-type: none"> Low profile, not well recognized as a major industry sector. Demand for construction and mining machinery is cyclical and erratic. Successful firms in Alberta's industrial equipment subsector are those that have been able to withstand this factor, as well as provide reliable and low maintenance machines. 	<p>Agricultural equipment:</p> <ul style="list-style-type: none"> Western Canada, particularly Saskatchewan. <p>Small Alberta manufacturers</p> <ul style="list-style-type: none"> Saskatchewan, Manitoba, U.S., especially key northern states, southern states increasing in importance. Also Ukraine, Mexico, Australia, Middle East in longterm. <p>Industrial equipment</p> <ul style="list-style-type: none"> Canada, U.S. 	<ul style="list-style-type: none"> Specialization has been the key to export markets, with Alberta firms exporting specialized parts and equipment to markets primarily in the U.S.. The trend is to design industrial and construction machinery with more efficient power units and faster work cycles. 	<p>In cooperation with other departments of government and with the private sector:</p> <ul style="list-style-type: none"> Provide better promotion and information resources. Maintain existing markets and improve awareness of positive and negative long-term market trends. Improve companies' awareness and identify new market opportunities. Promote strategic alliances of Alberta firms in global markets. Increase marketing abilities of companies. Increase management abilities of companies. Increase production and engineering capabilities of companies. Increase knowledge and use of technology by companies.

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<p>Four Subsectors:</p> <ul style="list-style-type: none"> • crops and feedstuffs • livestock, genetics and services • meat and animal by-products • processed foods. 	<ul style="list-style-type: none"> • Increased exports in value-added items such as beef, pork, processed meats and food products. • Bulk commodities such as canola seed, wheat and barley. 	<ul style="list-style-type: none"> • GATT and NAFTA have increased market access, but competition for those markets is great. 	<ul style="list-style-type: none"> • U.S. - largest export market: \$1.4 billion in 1993. • Japan - \$504 million in 1993 (canola seed, wheat, barley). • Mexico - livestock genetics, wheat, barley, canola, special crops, pork and dairy products. • Taiwan - \$42 million in 1993 (hides, alfalfa meal and pellets, other feeds, canola cake and meal, and barley). • South Korea (feed wheat, cattle hides, canola meal, and dehydrated alfalfa products). 	<ul style="list-style-type: none"> • South Korea - potential exists in barley, canola seed and oil, honey, water and pork. • Market access and greater sales are possible in South East Asian countries. • Eastern Siberia - similar potential to that of China. • Hong Kong - established market but shows potential as a trans-shipment centre in the Asia-Pacific Region. • Latin America - potential for wide range of products and services. • Eastern Europe and Former Soviet Union - potential for both agricultural food products and services. • Western Europe - the GATT should improve access in a number of sectors. 	<ul style="list-style-type: none"> • Improve industry's ability to access new market opportunities. • Improve industry's ability to add value to products. • Develop information and technology that improve competitiveness. • Ensure industry has access to needed technology, knowledge and skills. • Strengthen industry's ability to improve risk. • Ensure responsible stewardship of soil and water resources, and lands. • Encourage greater private sector involvement in funding and research.

ARCHITECTURE, ENGINEERING AND CONSTRUCTION (AEC)

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS /ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<p>Services used in design and construction of residential, commercial, industrial and institutional buildings and facilities, including transportation and municipal infrastructure.</p> <p>Architectural Services</p> <ul style="list-style-type: none"> Private firms, licensed under provincial legislation, provide independent architectural design and consulting services to the public. Generally firms are small businesses. The industry employs over 2,000 Albertans. <p>Consulting Engineering Services</p> <ul style="list-style-type: none"> Engineering and project management of commercial, institutional, industrial and infrastructure projects. Approximately 500 firms employ an estimated 6,500 Albertans. Estimated annual fee billings are \$1.2 billion. Over 80% of the firms are classified as small. Many are single or dual disciplined. <p>Construction Services</p> <ul style="list-style-type: none"> Building, renovation, repair and demolition of immobile structures; alteration of natural topography. About 4,500 registered firms, plus specialized tradespeople; approximately 13,000 employers, many with staff of 20 or less. Nearly 80,000 full-time employees, plus 15,000 more in peak periods. Expected to provide \$9.3 billion worth of services during 1994. 	<p>World Class Strengths</p> <p>Architecture</p> <ul style="list-style-type: none"> Residential housing Land development Corporate/office buildings Educational facilities Tourism/recreation facilities and support services Industrial/manufacturing support facilities Health care facilities and systems Restorations Agriculture facilities Project management <p>Engineering</p> <ul style="list-style-type: none"> Hydrocarbon exploration, development and processing Public infrastructure Tourism/recreation facilities and support services Industrial facilities Building envelope technology Thermal power generation and co-generation Pipelines and SCADA systems Water resource facilities Project management <p>Construction</p> <ul style="list-style-type: none"> Project and construction management Cold weather construction Public infrastructure 	<p>Major Factors</p> <ul style="list-style-type: none"> Financing (e.g. risk, bid support, and end user/international project). Market intelligence (geographic & project) Identification of qualified & reputable contacts or agents in potential markets Identification & formation of alliances & partnerships Marketing skills Cultural awareness of potential markets <p>Other Factors</p> <ul style="list-style-type: none"> Limited international awareness of sector Procurement policies Recognition of credentials Different codes and standards Different foreign investment, business establishment and contracting rules Different legislation and regulations Technical expertise Cost competitiveness Taxation structures Longterm focus Establishing foothold using strategic tools, e.g. Beijing Petroleum Training Centre, using "one big win" in each major market. 	<ul style="list-style-type: none"> Mexico Asia Pacific/South East Asia: China, Japan, Malaysia, Thailand, Indonesia India United States <p>New Markets</p> <ul style="list-style-type: none"> South East Asia: Vietnam South America Eastern and Central Europe 	<p>Expanded Markets</p> <ul style="list-style-type: none"> Mexico Asia Pacific /South East Asia: China, Japan, Malaysia, Thailand, Indonesia India United States <p>New Markets</p> <ul style="list-style-type: none"> South East Asia: Vietnam South America Eastern and Central Europe 	<p>Financing</p> <ul style="list-style-type: none"> Support the efforts of Alberta AEC businesses to access export financing. <p>Marketing/Market Intelligence</p> <ul style="list-style-type: none"> Help industry develop promotional tools and programs to raise international awareness of AEC services, companies, and specialized expertise. Improve level, type and timeliness of market intelligence for AEC businesses. <p>Partnering, Networking and Competitiveness</p> <ul style="list-style-type: none"> Help industry develop business skills, strategic partnering skills and networking programs to increase expertise in identifying opportunities and achieving success in international markets. Support increased integration of sector to improve: international competitiveness; effectiveness of industry associations; formation of strategic alliances and joint ventures, and potential for increased private sector/public sector co-operation. Increase sector's ability to compete in international and domestic markets by advocating on its behalf in intergovernmental negotiations.

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS /ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<p>Includes 'the Arts' and 'Cultural Industries'</p>	<ul style="list-style-type: none"> Contributed \$1.3 billion directly to the Alberta GDP in 1992/93; an additional indirect contribution of \$ 6 billion resulted in a combined impact of \$1.9 billion. Provided 58,302 direct jobs, and a combined total of 79,678 direct and indirect jobs in 1992/93. It costs less to generate a job in the arts than in other industries: \$20,000 to create an arts job; \$100,000 to create a job in light industry; and \$200,000 to create a job in heavy industry. A dynamic arts and cultural community is a critical factor in business locations. As with any other industry which provides such a significant contribution to society, underlying public and private investment and support is essential. Sector increasingly incorporates new technologies in production and delivery. 	<ul style="list-style-type: none"> Protection of intellectual property rights (e.g. copyright). Diminishing funding from government; need to create partnerships with private sector. Financing based on intellectual property difficult. Lack of baseline information and set monitoring procedures. Increasing competition for film attraction; also luring away talent. Costs of paper, etc. in regards to production in the province. Limited marketing and promotional skills and networks. 	<ul style="list-style-type: none"> Other parts of Canada U.S. Niche markets worldwide on individual company or product basis. 	<ul style="list-style-type: none"> Integration of individuals, companies and activities as a result of new technologies, delivery mechanisms (e.g. CD ROM), and increasing demands for products. Trends toward co-production and growth in national and international sales. 	<p>Market Identification, Penetration and Distribution</p> <ul style="list-style-type: none"> Improve measurement of results and comparison with other provinces (Identify information gaps and research needs; develop research proposals and seek funding; develop profiles of industries; and develop baseline information). Establish process for sharing market information on ongoing basis (Develop action plan to obtain information from international offices, trade officials, and industry). Identify opportunities and incorporate arts and cultural industry in international marketing initiatives to maximize publicity and awareness (Stakeholder action plan). <p>Training</p> <ul style="list-style-type: none"> Work with industries to identify needs and develop training and education programs to assist Alberta artists and companies (Export readiness, proactive marketing, technical, and business skills). <p>Financing</p> <ul style="list-style-type: none"> Work with governments, agencies, and the financial community to encourage changes in investment climate (Identify specific problems related to financing intellectual property; develop action plan). Work with industry to develop alternative and cost-effective funding mechanisms, such as strategic alliances. <p>Treatment of Intellectual Property</p> <ul style="list-style-type: none"> Work with industries to ensure appropriate intellectual property, neighbouring rights and copyright legislation is in place at all levels to protect the rights of Alberta-based artists and companies (Prepare and distribute information on regulatory environment in priority markets and work with stakeholders to address gaps).
<p>The Arts</p> <ul style="list-style-type: none"> Visual arts includes fine arts, crafts and design Performing arts Literary arts 					
<p>Cultural Industries</p> <ul style="list-style-type: none"> Independent film, video and television production and distribution Sound recording Book publishing Magazine publishing. In 1993, the direct economic impact of the cultural sector in Canada was over \$15 billion. 					

BIOTECHNOLOGY/MEDICAL AND HEALTH CARE PRODUCTS AND SERVICES

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> Two subsectors: biotechnology/ pharmaceuticals, and medical products and health care services. Biotechnology and pharmaceuticals focused on R & D. Research has resulted in spin-off companies. Medical products includes about 40 manufacturing firms, mainly small owner-operated and serving niche markets. Alberta firms have been providing services to the Middle East and Russia. 	<ul style="list-style-type: none"> Excellent infrastructure support, enabling world-class research capabilities and strategic partnerships between universities, research centres and private industry. Favourable regulatory environment, highly skilled health scientists, researchers and technical personnel, and a well-developed research, science and technology infrastructure. 	<ul style="list-style-type: none"> R & D is critical for these industries. 	<ul style="list-style-type: none"> Japan is a growing market for medical products and devices, particularly in products for the elderly. Kuwait, the United Arab Emirates and Saudi Arabia have been markets for health care services for a number of years. 	<ul style="list-style-type: none"> U.S. - outpatient care, nursing home care, medical waste management, drug delivery devices, DNA probes, minimally-invasive surgical devices, etc. Washington State - strategic alliances in joint R & D, cross marketing, joint clinical testing, manufacturing and distribution in biotechnology. Minnesota - potential joint ventures or strategic alliances with medical manufacturing industry. Mexico, Latin America, Eastern Europe - possible markets for expertise in health care management and delivery. Russia - equipment and pharmaceuticals to build infrastructure. Mexico - potential for turn-key operations. Middle East - health care professionals, health care management, management consulting, and service providers, i.e. human resource management and primary health care. 	<p>Priorities are:</p> <ul style="list-style-type: none"> develop strategic alliances and flexible networks strengthen Alberta's domestic market position increase marketing expertise and intelligence develop medical products and health services export strategies build the industry's image target geographic opportunities.

BUSINESS AND PROFESSIONAL SERVICES

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> 154,600 jobs in Alberta; 10.9% of Alberta's total workforce in 1994. Relates to services that are essential to the operation of all businesses. Includes: <ul style="list-style-type: none"> accounting, management consulting, financial services, business training, library services, advertising media, communications, legal services, information services, and personnel services. 	<ul style="list-style-type: none"> A number of well-established professional organizations. The sector has traditionally functioned without any government assistance. 	<ul style="list-style-type: none"> Not well organized as a sector and has not identified any strategic direction or priorities. 	<ul style="list-style-type: none"> The completion of the 1994 Alberta Services Export Survey will be the Alberta Government's first effort to track trade in services. 	<ul style="list-style-type: none"> In 1991, global exports of commercial services reached \$890 billion and accounted for nearly 1/4 of all world trade. In 1992, this sector added \$7.5 billion or 11.2% to Alberta's GDP. The largest contributors were finance and real estate valued at \$3.4 billion, and business services valued at \$2.2 billion. 	<p>Two areas are essential to the development of strategic direction:</p> <ul style="list-style-type: none"> establish baseline data on the sector participants and their business activities establish lines of communication between groups in the sector and government.

CHEMICALS, PETROCHEMICALS AND REFINED PETROLEUM PRODUCTS

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS /ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
Petrochemicals & Chemical Fertilizers <ul style="list-style-type: none"> Ethane-based ethylene & ethylene derivatives, methanol & methanol derivatives. Ammonia & ammonia fertilizers. 	<ul style="list-style-type: none"> Alberta's chemical and chemical products industry is the province's third largest manufacturing industry. In 1993, it directly employed 9,200 people, was Alberta's largest export sector in the manufacturing industry, and accounted for \$1.6 billion in exports or 27.7% of all manufacturing exports. The Alberta petrochemical industry is highly export-oriented. More than half of the value of production (\$1.2 billion in 1993) was sold to markets outside Canada. The industry is based on competitively priced feed stocks, competitive taxes, and sufficient ethane supplies. 	<ul style="list-style-type: none"> Petrochemicals and refined petroleum products are capital-intensive industries, dominated by large national/multinational corporations with decision makers outside Alberta. Refined petroleum products are primarily focused to supply Western Canada. In 1993, only 7% of its sales were outside Canada, mainly the result of the lower value-added nature of refined petroleum products compared to petrochemicals. 	<ul style="list-style-type: none"> The Alberta petrochemical industry is highly export-oriented. Major petrochemical markets include: the U.S., Western Europe, Asia and Latin America. More than half of the value of production (\$1.2 billion in 1993) was sold to markets outside Canada, 66% were destined to the U.S., and 32% were sold to Asia. Refined petroleum products are focused on the Western Canadian market; most trade between Canada and the U.S. occurs between adjacent border states and provinces. 	<ul style="list-style-type: none"> Investment opportunities have been identified and will be promoted. These include: oxygenated fuel additives, higher olefins, additional ethylene production, ethylene derivatives, propylene, and derivatives for local plastic producing and export. 	<p>Encourage expansion of the chemical industry through the following:</p> <ul style="list-style-type: none"> a competitive tax environment, including the amendment or replacement of the Machinery and Equipment tax maintain sufficient quantities of competitively priced feedstock explain the Alberta Advantage to key individuals in the global petrochemical industry, including feedstock pricing, ethane supply and transportation costs participate in key trade shows, conferences and international petrochemical events. Offer Alberta programs and information seminars with presentations on the Alberta Advantage, keynote speakers from the Alberta industry and government visit international petrochemical companies that express an interest in Alberta, to encourage them to seriously consider investing in Alberta in 1995/96. <p>Decision makers in multinational chemical companies reside outside Alberta. A strategy is needed on how best to work with these companies to meet Alberta's objectives.</p> <p>Alberta Ministers and officials should meet with CEOs of national and multinational chemical companies to encourage them to invest in Alberta. A communications strategy will be developed to support this.</p>
Industrial Inorganic Chemicals <ul style="list-style-type: none"> Carbon black, chlorine, sodium chlorate, caustic soda, hydrogen peroxide, hydrogen sulphide, hydrochloric acid, carbon dioxide & sulphuric acid. Generally used in industrial processes such as pulp & paper, mining, petroleum refining & fertilizers. 					
Organic & Specialty Chemicals <ul style="list-style-type: none"> Paints & varnishes, soaps and cleaning compounds, rust inhibitors, catalysts and other specialty chemicals used in the oil & gas industry. 					
Refined Petroleum Products <ul style="list-style-type: none"> Transportation fuels, heating oil, asphalt, petrochemical feedstock, kerosene, lubricants, and other miscellaneous products. 					
Chemical and Chemical Products <ul style="list-style-type: none"> Petrochemicals & chemical fertilizers, industrial inorganic chemicals, and specialty chemicals. 					

CONSUMER PRODUCTS

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<p>One of the largest components of world trade in goods.</p> <p>Subsectors include:</p> <ul style="list-style-type: none"> • furniture - 350 firms (mostly small); \$229.5 million shipments in 1993; • international exports \$63 million in 1993. • clothing, textiles and sewn products - 175 clothing manufacturers; 1993 shipments grew by 16.1% to reach \$161 million. • hardware and home improvement products - 800 companies; international exports \$12.5 million in 1993. • giftware and crafts - 8,000 producers; approximately \$80 million in gross sales. • sporting and recreational goods - 50 companies; Alberta shipments about \$20 million in 1993. 	<ul style="list-style-type: none"> • Alberta strengths include the production of a good quality product, the ability to customize the product to meet consumer demand, innovative design skills, and a skilled labour force. 	<ul style="list-style-type: none"> • Developing countries are increasing their share of world trade in both labour-intensive industries and capital-intensive, standard technology, mass production industries. • Alberta's competitive disadvantages include the current level of management and marketing capabilities of most companies to compete internationally, increased global competition, and high labour costs. • Industry is fragmented and diverse, making it difficult to measure size and activity. 	<ul style="list-style-type: none"> • Canada's export focus will be on developed countries, particularly the U.S. over the next five to 10 years. • Furniture: Germany, U.S., France, the Netherlands and U.K.. Taiwan is the largest competitor. • Clothing, textiles and sewn products: traditionally served small domestic markets; independent and specialty clothing stores offer good sales opportunities. • Hardware and home improvement products: niche markets in Japan, Mexico and Europe. • Giftware and crafts: U.S., Japan. • Sporting and recreational goods: Alberta, other Canada, U.S.; world market in sporting and recreational goods estimated at \$70 million (Canada has 3%); 44 Alberta companies in niche markets. 	<ul style="list-style-type: none"> • Trade in regional blocs is expected to increase faster than that between blocs or between developed and developing nations. • Developing countries are expected to gradually increase their share of consumption in consumer goods. • In developed countries, the fastest growth in demand will be in high-quality, fashionable and functionally designed products. • Aging population in developed countries, convenience of goods, and environmental trends will all affect demand. 	<ul style="list-style-type: none"> • Continually review global market and subsectors to identify and disseminate market opportunities. • Help firms develop business skills, marketing, export readiness. • Facilitate networking between producers and both suppliers and wholesalers. • Help firms identify market opportunities, both domestic and international. • Develop inventory of Alberta companies and producers.

EDUCATION AND TRAINING

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> • Consists of organizations engaged in the delivery of education and training services and products on a fee or contract basis. • Includes design, production and delivery of education and training programs and materials. • Export training and global awareness enhance Alberta's exports. 	<ul style="list-style-type: none"> • Highly qualified people and excellent facilities. • Modern, adaptive education and training sector, responsive to both social and economic progress. • Quality, reliability and acceptance of Canadian credentials internationally. • Alberta's reputation as a safe, clean, friendly, natural environment. • Programs promoting better understanding of international business. • Growing cooperation within some sectors of the industry. 	<ul style="list-style-type: none"> • International competition for education and training contracts is strong. • U.K., U.S., France, Japan, and Australia have all adopted aggressive, co-ordinated approaches that have resulted in their capturing significant parts of the international market. 	<ul style="list-style-type: none"> • U.S. - most accessible export market and can serve as springboard for others. • Niche markets - exist in Germany, Italy and France. 	<ul style="list-style-type: none"> • Growing markets in many countries for direct education and training purchases, • The markets with the greatest potential are Japan, Pakistan, Korea, Indonesia, India, China, Taiwan, Malaysia, Mexico, Canada, U.S., Kuwait, United Arab Emirates, Saudi Arabia, and Lebanon. • Human resource and institutional development. 	<ul style="list-style-type: none"> • Develop intelligence on export experience, expertise and existing and potential capacity of the sector. • Develop intelligence on priority market opportunities. • Develop marketing plan in co-operation with public and private organizations. • Assist sector in acquiring skills and knowledge needed to identify and take advantage of national and international opportunities. • Assist sector, public and private, to work more co-operatively. • Raise national and international profile as an experienced, reputable and innovative provider of a wide range of education and training goods and services. • Provide Albertans with the education and training they need to compete successfully in an increasingly global economy.

ENERGY AND OIL AND GAS EQUIPMENT AND SERVICES

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS /ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> Development of energy resources and related products represents over 20% of Alberta's economy, and royalties and bonuses account for approximately 20% of revenues. The Alberta industry has developed an extensive and unique capability for finding, producing, processing, transporting, and using conventional oil and gas, oil sands and coal. This in turn has created an extensive equipment manufacturing, supply and service sector, which is increasingly active and internationally competitive. Challenging geological and climatic conditions have resulted in development of unique and specialized equipment and skills. Growing equipment and services sub-sectors in the fields of exploration, production, transportation, engineering, construction and project management services are competitive worldwide. The upstream production sector comprises oil and natural gas, oil sands, coal, sulphur, electrical equipment technologies and services, and mineral and metals. 	<ul style="list-style-type: none"> Unique and specialized equipment and skills are competitive world-wide. Products and services include exploration, drilling, servicing, production and processing, pipeline transmission and distribution of oil and gas, and management of mineral resources such as coal and sulphur. Alberta is a major oil and gas producer, with a total production value of \$16.3 billion. Natural gas exports to the U.S. are the strongest growing market segment. Alberta's oil sands contain approximately 300 billion barrels of potential, recoverable crude petroleum. Alberta expertise in oil sands technology is in demand worldwide. Alberta's coals have low sulphur content and high reactivity, providing considerable environmental advantages. 	<p>Oil and Natural Gas</p> <ul style="list-style-type: none"> Cost-efficient pipeline access to North American markets make exports to offshore markets unattractive. <p>Coal</p> <ul style="list-style-type: none"> Challenge is to maintain cost competitiveness in export markets. <p>Sulphur</p> <ul style="list-style-type: none"> Challenge is to retain market share in existing markets while developing both new markets, for products such as plant nutrient sulphur (PNS), and new uses, such as in concrete. <p>Oil and Gas Equipment and Services</p> <ul style="list-style-type: none"> Challenge is to penetrate world markets with products and services and to promote the adoption of Alberta codes and regulations. 	<p>Oil and Natural Gas</p> <ul style="list-style-type: none"> United States <p>Coal</p> <ul style="list-style-type: none"> Steel production in Asia, Japan, S.Korea, Brazil. Power generation facilities worldwide. <p>Sulphur</p> <ul style="list-style-type: none"> Fertilizer production and chemical industry worldwide. <p>Oil and Gas Equipment and Services</p> <ul style="list-style-type: none"> Markets for oil and gas products and services include mature oil producing countries, new producer countries and emerging oil and gas producing countries. Efforts to identify alliances/partners for strategic and financial reasons include countries/cities deemed as gateway markets. Major consumer countries are also markets to identify financial and strategic partners for international oil and gas development. 	<p>Exports include:</p> <ul style="list-style-type: none"> exploration and equipment and services, production and equipment and services, transportation equipment and services, engineering and construction and project management, training and safety services, energy and environmental management regulatory advice. <p>Alberta know how and technology have been adapted to specialized conditions for remote locations, cold weather, sour gas, and heavy oil and oil sands.</p>	<p>Oil and Natural Gas</p> <ul style="list-style-type: none"> Encourage sustainable development by the private sector while ensuring protection of the environment. <p>Oil Sands</p> <ul style="list-style-type: none"> Encourage further development and investment. <p>Coal</p> <ul style="list-style-type: none"> Work with industry to identify actions. <p>Sulphur</p> <ul style="list-style-type: none"> The private sector to seek opportunities. <p>Electric Power Generation</p> <ul style="list-style-type: none"> Develop regulatory framework and industry structure that promotes a highly efficient electricity sector. <p>Minerals and Metals</p> <ul style="list-style-type: none"> Increase the quality and quantity of baseline geological information necessary to attract the attention of the mineral exploration industry. <p>Oil and Gas Equipment and Services</p> <p>Increase the international competitiveness of the sector as follows:</p> <ul style="list-style-type: none"> Liaise with industry associations to disseminate information about project opportunities and strategic issues. Encourage company linkages and consortia formation. Facilitate manufacturing and service growth through business establishment, plant expansion, and investment prospecting. Assist with export development in priority markets through incoming and outgoing trade missions, domestic and international trade fairs and promotion of strategic alliances.

ENVIRONMENTAL INDUSTRIES AND SERVICES

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> Approximately 800 companies employ about 8,000 workers and generate \$600 M to \$700 M annually in revenue. Focus is on services for 70 % of firms. Sector consists of four basic groups: small entrepreneurs, consulting services, equipment suppliers, and manufacturers of environmental products. 	<ul style="list-style-type: none"> Competitive strengths in environmental processes, products and services. Of the four western provinces, Alberta has the best established environmental industry association. World-competitive products and processes: water/wastewater treatment, environmental effects monitoring, recycling, site remediation, hazardous waste collection and treatment, and laboratory services. Expertise in environmental policies and regulatory processes. Well developed infrastructure including Swan Hills, Vegreville - Environmental Centre, and the Alberta Research Council. 	<ul style="list-style-type: none"> Less than half the domestic market is being supplied by Canadian companies. The bulk is being supplied through imports (90% of which are from the U.S.). At present, less than half of Alberta companies are exporting. 	<ul style="list-style-type: none"> 60% of total environmental sales by Alberta companies were within the province. Export markets include: western provinces (13.8%), U.S. (12.6%), eastern provinces (5.5%), western Europe (3.3%), Pacific Rim (3.3%), and eastern Europe (0.2%). 	<ul style="list-style-type: none"> Sector is changing its orientation from environmental clean-up to the development of new processes and technologies to reduce environmental problems. Significant opportunities for growth in international markets, particularly the U.S., Latin America, Europe and Asia. NAFTA presents excellent opportunities for products and services. Alberta's expertise in regulatory processes and environment policy. 	<ul style="list-style-type: none"> Attract investment. Strengthen and expand R&D. Improve market intelligence. Export training. Identify opportunities. Raise international awareness. Improve access to specific markets.

FOREST AND BUILDING PRODUCTS

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> • Fourth largest primary economic sector in Alberta, behind energy, agriculture and tourism. 1993 shipments were estimated at \$3 billion. • Direct employment in Alberta's primary and secondary forest industries is estimated at 19,500, with direct and indirect employment estimated at 48,750. • Total sector shipments in 1996 are anticipated to exceed \$4 billion. For the primary and secondary wood products industries alone, shipments should be up from \$2.5 billion to about \$3.5 billion, a result of expansion and industry price increases. International exports in 1993 were \$1.7 billion. • Almost \$4 billion in new investment has occurred in the sector since 1986, with a major increase in the production of pulp, newsprint, oriented strandboard (OSB) and medium density fibreboard (MDF). • The major industry groups are: pulp and paper; wood and panelboard; value-added wood and non-wood building products; related machinery, equipment, supplies and services. 	<ul style="list-style-type: none"> • Manufacturers of pulp and paper, lumber and panelboard are highly efficient due to recent investments, modern technology and a favourable business climate and infrastructure. • Alberta's resources produce quality products: pulp with high brightness and strength make it ideally suited to producing a wide range of paper products and lumber preferred by home builders and millwork firms in North America and overseas. • Over the next few years, growth should continue as pulp and paper producers expand capacity and consider moving into value-added products such as fine paper. • There is a solid base of producers of "value-added" lumber and engineered wood products in the province. Two new OSB mills will come on line, the MDF mill will complete an expansion and Alberta's first laminated veneer lumber mill will start up in 1995-96. • Industry expansion, favourable exchange rates and increasing prices are causing industry growth. 	<p>Challenges faced by the industry include:</p> <ul style="list-style-type: none"> • maintaining competitiveness • responding to growing environmental awareness • addressing restrictive trade practices. <p>Need to assist small and medium-sized Alberta producers of value-added wood and non-wood building products as they prepare to compete in export markets. This involves the provision of market intelligence, counselling and, for some firms, participation in targeted trade shows and incoming and outgoing market and technical awareness missions.</p>	<p>Value-Added Wood and Non-Wood Building Products</p> <ul style="list-style-type: none"> • Asia Pacific, Japan • Canada, U.S. • Alberta <p>Wood and Panelboard</p> <ul style="list-style-type: none"> • Canada, U.S. • Europe • Asia Pacific, Japan • Alberta <p>Pulp and Paper</p> <ul style="list-style-type: none"> • Asia Pacific, Japan • Canada, U.S. • Western Europe <p>Related Supplies and Services</p> <ul style="list-style-type: none"> • Alberta, B.C., Saskatchewan • U.S. Pacific Northwest • Mexico • South America • Eastern Europe 	<p>Products</p> <ul style="list-style-type: none"> • Softwood & hardwood BKP (pulp), softwood & hardwood BCTMP (pulp), newsprint, paperboard and building paper, softwood lumber, structural panels, particle board, MDF, value-added lumber products, secondary wood products, landscaping products, mechanical and electrical products, pre-fabricated homes, non-wood building products, suppliers of plant machinery & equipment, and transportation and distribution. <p>Services</p> <ul style="list-style-type: none"> • Consulting, environmental engineering, technical and scientific support services, and forest management and technology services. 	<ul style="list-style-type: none"> • Foster environmental leadership. • Enhance export readiness. • Secure and expand market access. • Provide a competitive economic and regulatory structure. • Focus on priority export markets. • Support strategic alliances. • Develop a strategy for value-added wood products in co-operation with industry. • Explore markets for pre-packaged housing units as a vehicle to selling Alberta products and expertise. • Work with industry to identify supply and manufacturing opportunities. • Organize technology missions and demonstration workshops to facilitate technology transfer.

INFORMATION TECHNOLOGY

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
Electronics/Telecommunications <ul style="list-style-type: none">220 Alberta companies in electronic design and manufacturing.Value of shipments \$1.95 B in 1994.Employs about 7,460 people.Approximately 67% of product is exported outside of Canada. Software/Computing Services <ul style="list-style-type: none">Over 1,300 companies in software/computing services. Over 400 companies export outside the province.Strengths in technical applications.Electronics includes six subsectors: electronic parts & components; instrumentation & control; electronic design & subassembly; computer & peripheral equipment; telecommunication equipment; and telecommunications services.	Telecommunications <ul style="list-style-type: none">Growth attributed to establishment of advanced technology institutes.The Hewlett-Packard, IDACOM division is a world leader in producing and marketing protocol test equipment.Leader in telecom manufacturing.JRC Canada Inc., Lethbridge, is Canada's only designer and manufacturer of cellular telephones. Telecommunications Services <ul style="list-style-type: none">Telecom carriers ensure access to new technological advances. In 1993, carriers had combined annual revenues of \$1.57 billion and employed almost 10,000 people.Alberta has a key role in building Canada's advanced information and communications infrastructure. Software/Computing Services <ul style="list-style-type: none">Rapid growth in global opportunities, including Canada's "information highway".Technical applications expertise in niche areas: oil & gas/seismic, geomatics, communications /networking, and educational & training software.Produces good quality technically robust products.Proximity to U.S., the world's largest software/computing services market.Well qualified graduates from Alberta's universities and technical schools.	Electronics and Telecommunications <ul style="list-style-type: none">Demand for reduced time to market and rapid expansion to meet global competition.Extensive R&D needed for new products to develop and influence international standards.Major changes in entertainment services.Increased social and government pressures.Shift from mainframe-based systems to desktop applications.Restructuring of telecom industry into broadband (multi-media) and wireless communications. Software /Computing Services <ul style="list-style-type: none">Local firms suggest small size and/or financed to address business planning and international marketing.Industry assets often intangible and make financing difficult.Also concerns over protecting intellectual property and copyright.Small domestic market means must exploit global markets.Market volatile and highly competitive, requiring continuous innovation and adaptation.Uneven cash flow, with significant non-recurring revenues, makes financial planning difficult.	Electronics and Telecommunications <ul style="list-style-type: none">U.S. (39% of Alberta's goods and services), Europe (12% of products shipped), Asia Pacific (6% of exports in 1993), and Latin America, and the Middle East (2% of export market). Software and Computing Services <ul style="list-style-type: none">Canada, U.S., Mexico/Latin America, Japan, Korea, Southeast Asia, China, Taiwan, Hong Kong, Europe, and Russia/Eastern Europe.	Electronics and Telecommunications <ul style="list-style-type: none">Telecommunications equipment, oil field instrumentation, control systems, computer and peripheral equipment, contract assembly, geomatics and power systems. Software and Computing Services <ul style="list-style-type: none">Oil and gas, seismic, geomatics, manufacturing, communications /network, systems enhancement, office automation, marketing, accounting, educational and SCADA.	Electronics and Telecommunications <ul style="list-style-type: none">Identify equipment and component manufacturing opportunities and encourage supplier development initiatives with the Information Technology Association of Canada.Facilitate joint ventures and strategic alliances between foreign and Alberta companies through federal initiatives, missions, trade shows and networking.Continue to support and promote Alberta's technology infrastructure as an effective means of providing technology transfer and prototype development for industry.Work with telecommunication and cable carriers to identify new business opportunities resulting from the convergence of sectors.Identify, encourage, create and support clusters of excellence. Software/Computing Services <ul style="list-style-type: none">Conduct comprehensive characterization of the subsectors.Determine growth potential and barriers to entry in non-North American markets.Enhance access to financial markets.Enhance access to the Internet and encourage development of this infrastructure.Promote "Alberta Advantage" and local company capabilities.Assist companies to become export ready through education and marketing assistance.

INVESTMENT

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<p>Several trends are influencing economic development agencies' approach to facilitating investment.</p> <ul style="list-style-type: none"> • Demand for investment capital has become more competitive so that more countries are actively seeking investment opportunities to invest are growing in "new economy" industries or in applying "new economy" technologies to traditional industries, and capital is becoming more and more mobile. • The focus and roles of government continue to evolve. • New concerns such as regulatory burdens and the environment are becoming important in defining investment risk. • The emergence of distinct trading blocs may have a pronounced influence on future capital flows. 	<ul style="list-style-type: none"> • One of the fastest growing economies in Canada. • Alberta has differentiated itself by choosing to move away from direct financial incentives to business, and to focus on the province's economic fundamentals and the overall climate for business. 	<ul style="list-style-type: none"> • Competition in attracting investment is heightened by incentives offered by economic development agencies. • Competitive North American market for investment. • Competition to secure investment is increasing globally. 	<ul style="list-style-type: none"> • Varies with industry sector. 	<ul style="list-style-type: none"> • Varies with industry sector. 	<ul style="list-style-type: none"> • Visible and personal relationships with decision makers in national and international finance, the business community and other governments, led by the Premier, ministers and senior government officials. • Partnership and cooperation with Alberta's industry, business communities and other levels of government. • A strategic communications plan and materials, marketing the Alberta Advantage and investment potential. • Accurate and timely market intelligence; in-depth knowledge and understanding of Alberta's advantages; focused actions and responses to clients. • An in-depth knowledge and understanding of local and out-of-province investors' needs and sensitivities; service orientation. • An in-depth knowledge and understanding of Alberta's competitors.

PLASTICS AND ADVANCED MATERIALS AND PROCESSES

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> Over 300 companies in this sector. Plastics products range from commodity industrial and consumer products, to higher technology products for the electronics, computer, telecommunications and aerospace industries. Advanced material companies produce a range of specialty polymers, metals, ceramics and composites. Total annual sales in plastics is estimated at \$600 million. The sector employs some 15,000 persons. 	<ul style="list-style-type: none"> Growing 4 to 5 times faster than the rest of the economy. Modern, efficient, competitive and highly motivated. Alberta is becoming the centre of Canadian industrial polymer manufacturing and the centre of industrial research for these materials. 	<ul style="list-style-type: none"> Advanced material companies need to maintain R & D to be competitive, therefore risk management becomes critical. Alberta manufacturers of Advanced Manufacturing Technologies (AMT) products are in the early stages of development and are smaller than their competitors in other provinces and countries. 	<ul style="list-style-type: none"> Advanced materials and process technologies are strategically important to Alberta's traditional industries such as oil and gas, forestry, petrochemicals, as well as emerging industries like telecommunications, electronics and health care. Plastics markets tend to be regional rather than global due to transport costs. In 1994, demand for plastics grew throughout North America. Priority markets are Western Canada and the Pacific Northwest United States. International markets include the United States, Western Europe, Japan, Latin America, Mexico, Taiwan, Korea, Malaysia, Hong Kong, and Thailand. 	<ul style="list-style-type: none"> Emerging industries offer high value-added potential but low volume output in the near term. Opportunities exist for expanded manufacturing of plastics in Alberta for products currently being imported to the western region. The next generation of manufacturing, AMT, will bring design, production and inventory control together into integrated systems. Manufacturing processes will be simplified. New advanced automated equipment will be developed. The use of new materials is expected to accelerate, requiring advanced processing machinery. Australia, Canada, Europe, Japan and the United States are cooperating in the Intelligent Manufacturing Systems Program. Now in the feasibility stage, IMS aims to develop new technologies and establish international standards for the next generation of industrial technologies, while sharing the costs and risks. 	<ul style="list-style-type: none"> Advanced materials Strengthen international competitiveness of polymer industry. Support a domestic and export growth strategy for sector companies. Maximize economic benefit of Westaim - developed advanced materials and process technologies. Address needs of the industry where possible. Align public technology infrastructure with industry needs. Create and encourage flexible business networks; encourage strategic alliances. Identify companies and sectors that could be more efficient by use of enabling technologies. Encourage use of R & D resources. Explore potential for increased market penetration. Encourage firms to use export orientation programs offered by ED&T.

TOURISM

SECTOR INFORMATION	SECTOR STRENGTHS	CONSTRAINTS/ISSUES	CURRENT MARKETS	OPPORTUNITIES	STRATEGIC DIRECTIONS
<ul style="list-style-type: none"> • Alberta's third largest industry. • Generated \$3.12 billion in revenue in 1993 (\$1.45 billion from non-residents; \$1.67 billion from Albertans). • Employs about 92,300 Albertans. • Generated \$1.1 billion in tax revenues (\$710 million federal, \$282 million provincial, \$114 million municipal). • Diverse range of world-class natural and heritage attractions, facilities and services. 	<ul style="list-style-type: none"> • Internationally recognized destination; high quality product. • Diverse natural beauty and scenery; national parks, protected areas, wildlife, uncrowded. • Opportunities to escape or get back to nature yet close to urban comforts. • Urban centres are modern, accessible, safe and clean. • Array of hard or soft adventure activities. • World-class historic sites, museums and resources. • Festivals offer unique experiences. • Competitive value for dollar with no sales tax, plus friendly hospitality. • New product e.g. Bow Corridor, smaller scale accommodation, and urban parks/recreation experiences packaged with business and convention products. 	<ul style="list-style-type: none"> • Limited awareness and misperceptions of province. • Increasing competition from more aggressive destinations. • Accessibility/lack of direct flights from some markets. • Need to increase year round tourism. • Service levels good, but need to respond to demands of international visitors (currency exchange, known service chains). • Need new facilities or products based on market demand. • Competition for investment dollars. • Sustainable tourism; challenge to balance growth and conservation. • Increased demand for cooperative marketing; return on investment. 	<p>Existing Primary</p> <ul style="list-style-type: none"> • Canada - Western Canada, Ontario • U.S. - California, Washington, Texas, Florida, New York • Japan • Germany • United Kingdom <p>Existing Secondary</p> <ul style="list-style-type: none"> • Other Canada, Australia/New Zealand, France, Switzerland, and Netherlands. <p>Emerging</p> <ul style="list-style-type: none"> • Hong Kong, Taiwan, Italy, Austria, South Korea, Argentina, Brazil, and Mexico. 	<ul style="list-style-type: none"> • Improved global economy is providing markets with increased wealth and desire to travel. • Opportunities for cooperative marketing initiatives with other jurisdictions in areas of mutual interest. • Current exchange rate for \$U.S., plus no provincial sales tax, is incentive for travel to Alberta from both domestic and foreign markets. • Trend to getaways means opportunities to capitalize on time-sensitive, value-added incentives targeting 'visiting friends and relatives' and getaways. • Diversity and quality of landscapes and product position Alberta to respond to growing demand for wide range of tourism products and experiences. • New developments, such as in Bow Corridor and small scale accommodation throughout the province, offer new products to respond to market demands. 	<ul style="list-style-type: none"> • In cooperation with the tourism industry, strengthen existing, and develop new, partnerships to pursue strategic directions. • Identify research requirements, undertake research into products and markets, and disseminate results to industry partners. • Encourage development, growth, and investment in the tourism industry. • Increase private sector and community awareness of the benefits of, and encourage investment in, community-based tourism. • Emphasize priority markets and initiatives that offer the greatest return on investment. • Present a consistent and co-ordinated image to out-of-province markets.

